

Full HD PTZ Camera

PTC-100



INSTRUCTION MANUAL

www.datavideo-tek.com

Contents

Warnings and Precautions	3
Warranty	4
Disposal	4
Packing List	4
Introduction	5
Product Overview	5
Features	5
Connections & Controls	6
PTC-100 Front View	6
PTC-100 Rear View	7
PTC-100 Bottom View	9
PTC-100 Installation Guide	12
OSD Operational Description	16
CAMERA SETUP > FOCUS SETUP	19
CAMERA SETUP > EXPOSURE SETUP	19
CAMERA > DAY/ NIGHT	20
CAMERA > WHITE BALANCE	21
CAMERA SETUP > NOISE REDUCTION	21
CAMERA SETUP > EFFECT SETUP	22
GROUP SETUP	22
VIDEO SETP	23
OSD SETUP	24
Remote Controller Button Description	27
Dimension	31
Specification	32
Service & Support	36



Warnings and Precautions

1. Read all of these warnings and save them for later reference.
2. Follow all warnings and instructions marked on this unit.
3. Unplug this unit from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.
4. Do not use this unit in or near water.
5. Do not place this unit on an unstable cart, stand, or table. The unit may fall, causing serious damage.
6. Slots and openings on the cabinet top, back, and bottom are provided for ventilation. To ensure safe and reliable operation of this unit, and to protect it from overheating, do not block or cover these openings. Do not place this unit on a bed, sofa, rug, or similar surface, as the ventilation openings on the bottom of the cabinet will be blocked. This unit should never be placed near or over a heat register or radiator. This unit should not be placed in a built-in installation unless proper ventilation is provided.
7. This product should only be operated from the type of power source indicated on the marking label of the AC adapter. If you are not sure of the type of power available, consult your Datavideo dealer or your local power company.
8. Do not allow anything to rest on the power cord. Do not locate this unit where the power cord will be walked on, rolled over, or otherwise stressed.
9. If an extension cord must be used with this unit, make sure that the total of the ampere ratings on the products plugged into the extension cord do not exceed the extension cord's rating.
10. Make sure that the total amperes of all the units that are plugged into a single wall outlet do not exceed 15 amperes.
11. Never push objects of any kind into this unit through the cabinet ventilation slots, as they may touch dangerous voltage points or short out parts that could result in risk of fire or electric shock. Never spill liquid of any kind onto or into this unit.
12. Except as specifically explained elsewhere in this manual, do not attempt to service this product yourself. Opening or removing covers that are marked "Do Not Remove" may expose you to dangerous voltage points or other risks, and will void your warranty. Refer all service issues to qualified service personnel.
13. Unplug this product from the wall outlet and refer to qualified service personnel under the following conditions:
 - (1) When the power cord is damaged or frayed;
 - (2) When liquid has spilled into the unit;
 - (3) When the product has been exposed to rain or water;
 - (4) When the product does not operate normally under normal operating conditions. Adjust only those controls that are covered by the operating instructions in this manual; improper adjustment of other controls may result in damage to the unit and may often require extensive work by a qualified technician to restore the unit to normal operation;
 - (5) When the product has been dropped or the cabinet has been damaged;
 - (6) When the product exhibits a distinct change in performance, indicating a need for service.

Warranty

Standard Warranty

- Datavideo equipment is guaranteed against any manufacturing defects for one year from the date of purchase.
- The original purchase invoice or other documentary evidence should be supplied at the time of any request for repair under warranty.
- Damage caused by accident, misuse, unauthorized repairs, sand, grit or water is not covered by this warranty.
- All mail or transportation costs including insurance are at the expense of the owner.
- All other claims of any nature are not covered.
- Cables & batteries are not covered under warranty.
- Warranty only valid within the country or region of purchase.
- Your statutory rights are not affected.

Two Year Warranty

- All Datavideo products purchased after 01-Oct.-2008 qualify for a free one year extension to the standard Warranty, providing the product is registered with Datavideo within 30 days of purchase. For information on how to register please visit www.datavideo-tek.com or contact your local Datavideo office or authorized Distributors
- Certain parts with limited lifetime expectancy such as LCD Panels, DVD Drives, Hard Drives are only covered for the first 10,000 hours, or 1 year (whichever comes first).
- Any second year warranty claims must be made to your local Datavideo office or one of its authorized Distributors before the extended warranty expires.

Disposal



For EU Customers only - WEEE Marking

This symbol on the product indicates that it should not be treated as household waste. It must be handed over to the applicable take-back scheme for the recycling of waste electrical and electronic equipment. For more detailed information about the recycling of this product, please contact your local Datavideo office.

Packing List

Items	Description	Q'ty
1	PTC-100	1
2	Power Adaptor	1
3	Power Cord	1
4	Remote Controller (batteries included)	1
5	Bracket	1
6	Instruction Manual	1

Introduction

Thank you for purchasing the Datavideo PTC-100 Full HD PTZ Camera. We hope you will be pleased with your purchase, and with what you can achieve with this camera. In order to get the most out of your camera, we recommend that you spend some time getting familiar with this manual, as it will describe all the functions of this unit. In addition, you'll find some useful background information [on how to install and set up this Pan, Tilt and Zoom camera](#).

Product Overview

The PTC-100 has been designed with many indoor applications in mind such as live theatre events, concerts, conferencing, worship, news studio, talk shows, education, indoor sports and security. The Datavideo PTC-100 combines outstanding image quality with super smooth and quiet pan/tilt/zoom operation. The PTC-100 produces high quality video in a wide range of lighting conditions and supports 1080/30p, 1080/59.94i, 1080/50i, 720/59.94p, 720/50p, as well as 480/59.94i (NTSC) and 576/50i (PAL).

The PTC-100 can be securely mounted in a variety of positions allowing its use in almost any location. Find new creative shots and place this camera where the conventional cameraman cannot go such as on a ceiling, wall, motorised dolly or even a camera boom.

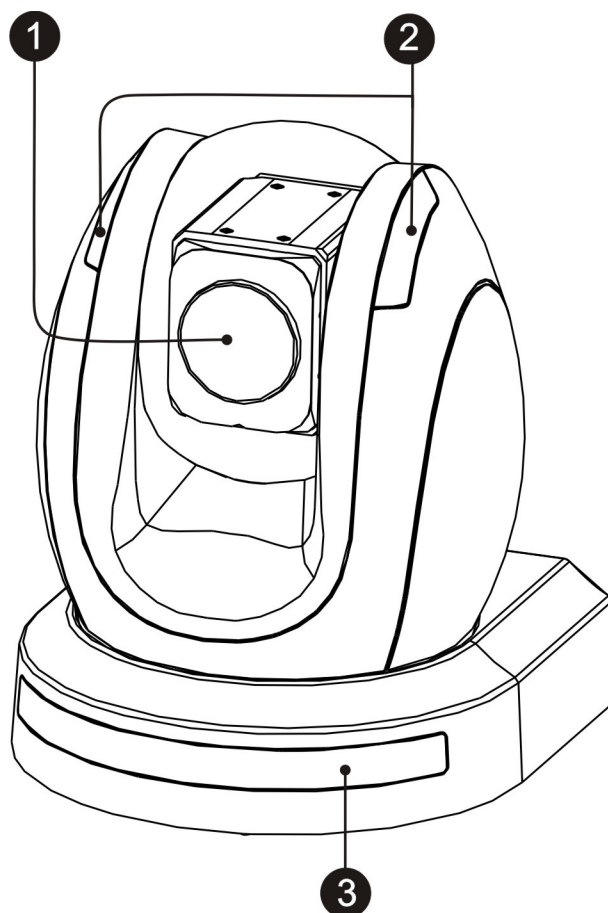
When combined with the Datavideo RMC-180 a network of up to 4 PTC-100 cameras can be easily controlled by one user. This camera also has an option to be controlled via RS-422 over an RJ45 connection allowing the possibility of bespoke builds by system integrators. The camera also supports Pelco D/P; Sony VISCA protocols.

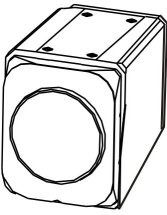
Features

- **HD Resolution (1080P):** 1/3" SONY High Definition 3.0 MegaPixels CMOS sensor
- **High Sensitivity** to support the low lux environment through "**Exmor**" technology
- **Line Focus Application** can continue focusing when Zoom has been enabled
- **OSD Operation** through IR/ RF Controller
- **Gamma Wide Dynamic Range (ATR-EX)** function perfectly shows the image details between dark and light. Newly added environment dynamic detection switch, enhancing WDR image efficiency.
- **Applied with Digital Noise Reduction Function (DNR)** to reduce the noise and enable clearer image under low light conditions.
- **Applied Digital Slow Shutter (DSS)** to add the sensor sensitivity in low light conditions.
- **IR-Cut filter Removable (ICR)** provides changes from color to BW mode automatically or manually for day and night 24-hour surveillance.
- **Multi-language OSD** (English, Simply Chinese and Traditional Chinese)
- **Low power Consumption** to avoid the Hot Issue
- **Power ON/ OFF Application** (Like Sleep mode)
- **Video Output:** HD-SDI + CVBS + HDMI
- **Tally LED Design** (IR/RF Controller/RS422/ DVIP Operation)
- **Supports Pelco D/P and SONY Visca Protocol Keyboard**
- **DVIP Control Board with Daughter Board Design**

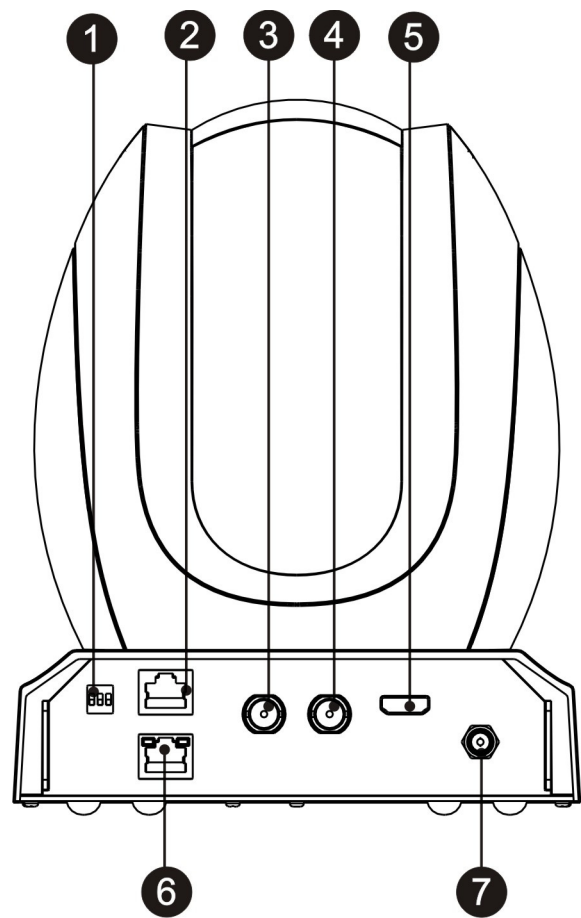
Connections & Controls

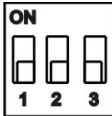

PTC-100 Front View








Item	Illustration	Name	Description
1		Lens	Built-in 1/3" Sony Exmor 3.0MP CMOS HD color camera with white balance control, backlight compensation settings, and automatic gain settings etc.
2	Shown above 2	Tally LED	Tally lamp lights-up when tally signal has been transmitted to the tally signal box.
3	Shown above 3	Sensor for the Remote Commander	Remote controller receiver.

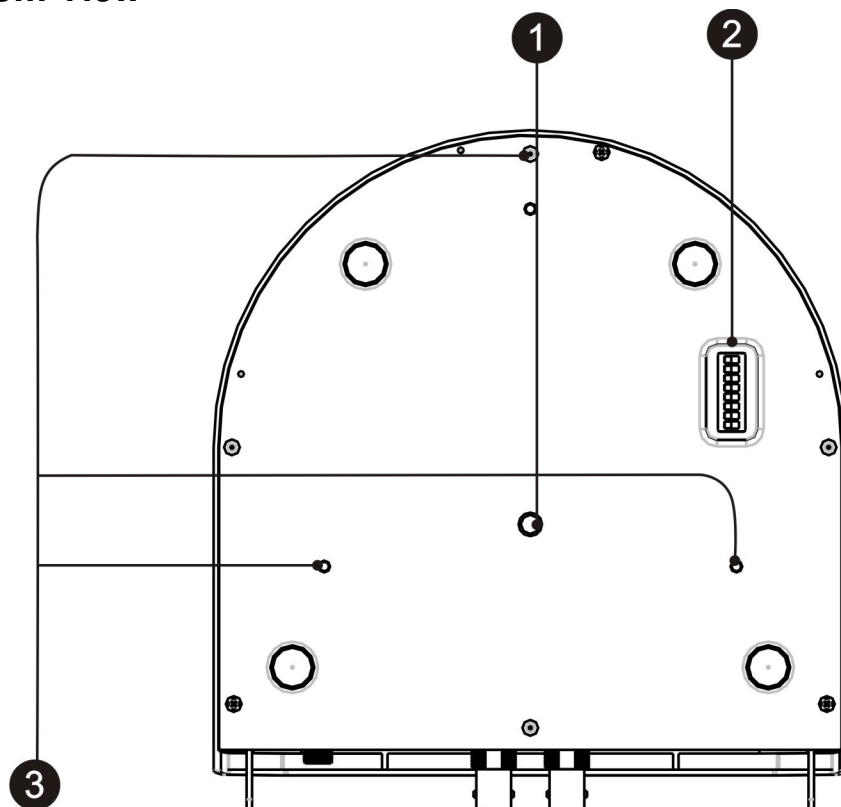
PTC-100 Rear View


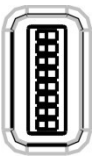



Item	Illustration	Function	Description																				
1		SW2: IRID&DVIP Setup	<p>Bold letters indicates factory default value.</p> <table><tr><th colspan="2">Setup</th></tr><tr><th>Switch Number #1 #2</th><th>IRID</th></tr><tr><td>Off Off</td><td>CAM 1</td></tr><tr><td>On Off</td><td>CAM 2</td></tr><tr><td>Off On</td><td>CAM 3</td></tr><tr><td>On On</td><td>CAM 4</td></tr></table> <table><tr><th colspan="2">Setup</th></tr><tr><th>Switch Number #3</th><th>Function</th></tr><tr><td>Off</td><td>DVIP</td></tr><tr><td>On</td><td>RS422</td></tr></table>	Setup		Switch Number #1 #2	IRID	Off Off	CAM 1	On Off	CAM 2	Off On	CAM 3	On On	CAM 4	Setup		Switch Number #3	Function	Off	DVIP	On	RS422
Setup																							
Switch Number #1 #2	IRID																						
Off Off	CAM 1																						
On Off	CAM 2																						
Off On	CAM 3																						
On On	CAM 4																						
Setup																							
Switch Number #3	Function																						
Off	DVIP																						
On	RS422																						
2		RS422 Communication Control Input	Set #3 of SW2 to ON to connect RS422 and RJ45.																				

Item	Illustration	Function	Description
3		HD-SDI OUT	Video signal output 800mV+-10% 75Ω BNC
4		CVBS OUT	Video signal output CVBS 1.0Vp-p 75Ω BNC
5		HDMI OUT	Video signal output 16-bit YCbCr 4:2:2
6		DVIP Communication Control Input	Set #3 of SW2 to OFF to connect RJ45 and DVIP.
7		Power Input Terminal	DC 12V Input, maximum power consumption is 2A

PTC-100 Bottom View

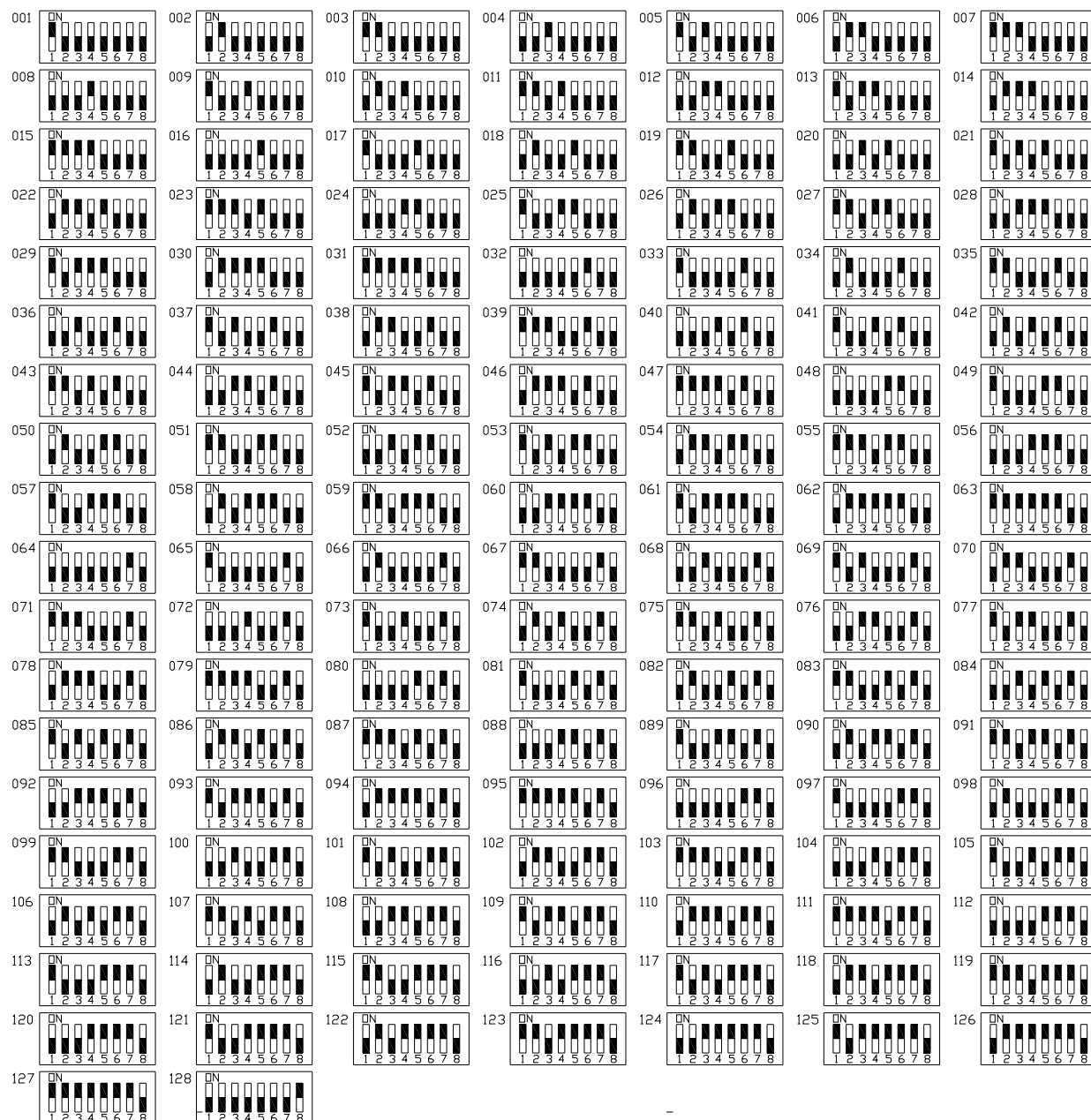


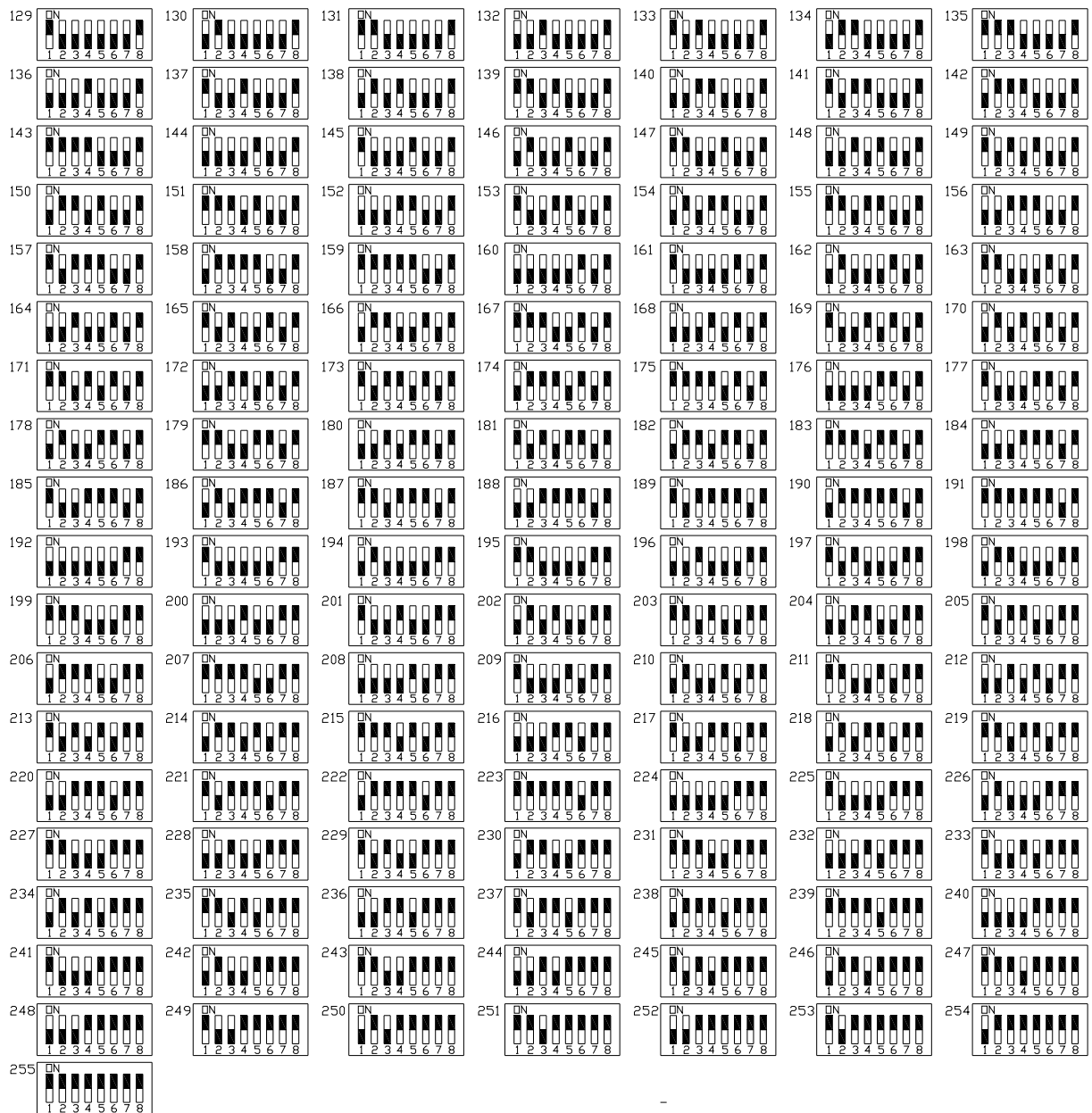
Item	Illustration	Function	Description
1	Shown above 	Tripod screw hole	
2		SW1: DIP Switch setup	PTZ cameras can be connected in series of up to 225 devices; each PTZ camera has its own ID number and may not be repeated.
3	Shown above 	Screw Hole	Ceiling bracket mounting screw holes.

PTZ cameras can be connected in series 255; each PTZ camera machine must be set to the ID position.

SW1: ID Setup:

PTZ cameras can be connected in series of up to 225 devices; each PTZ camera has its own ID number and may not be repeated.





DIP switch setting, as shown below:



Set to 000, then the image display will show: ID 1.

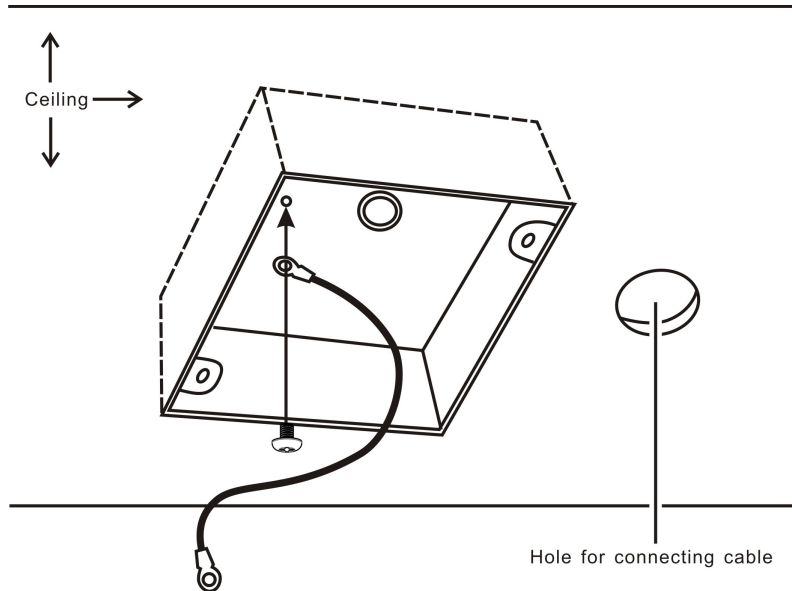
PTC-100 Installation Guide

Step 1

Set the IMAGE FLIP switch on the rear panel to ON.

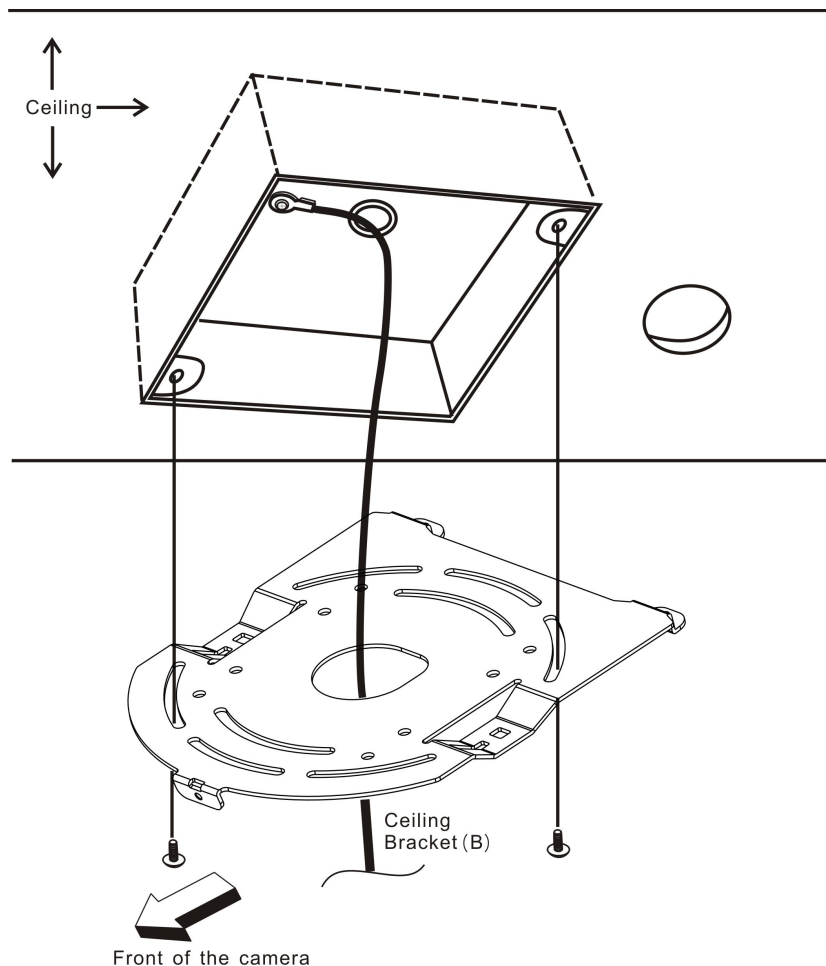
Step 2

Attach the retaining wire to the junction box in the ceiling. Use a screw hole and a screw (not supplied) in the junction box to attach the retaining wire.



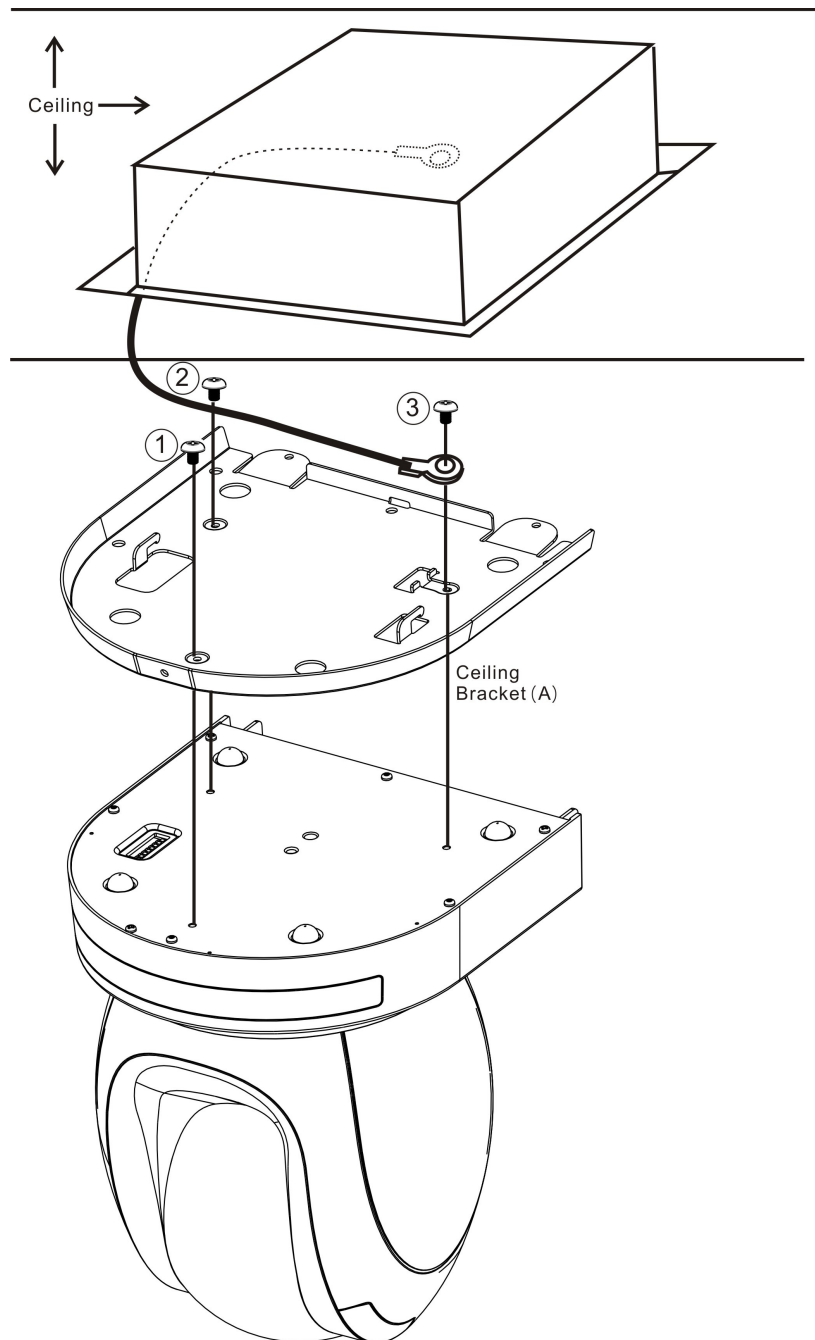
Step 3

Attach the ceiling bracket (B) to the junction box on the ceiling. Make sure to align the holes in the bracket with those in the junction box.



Step 4

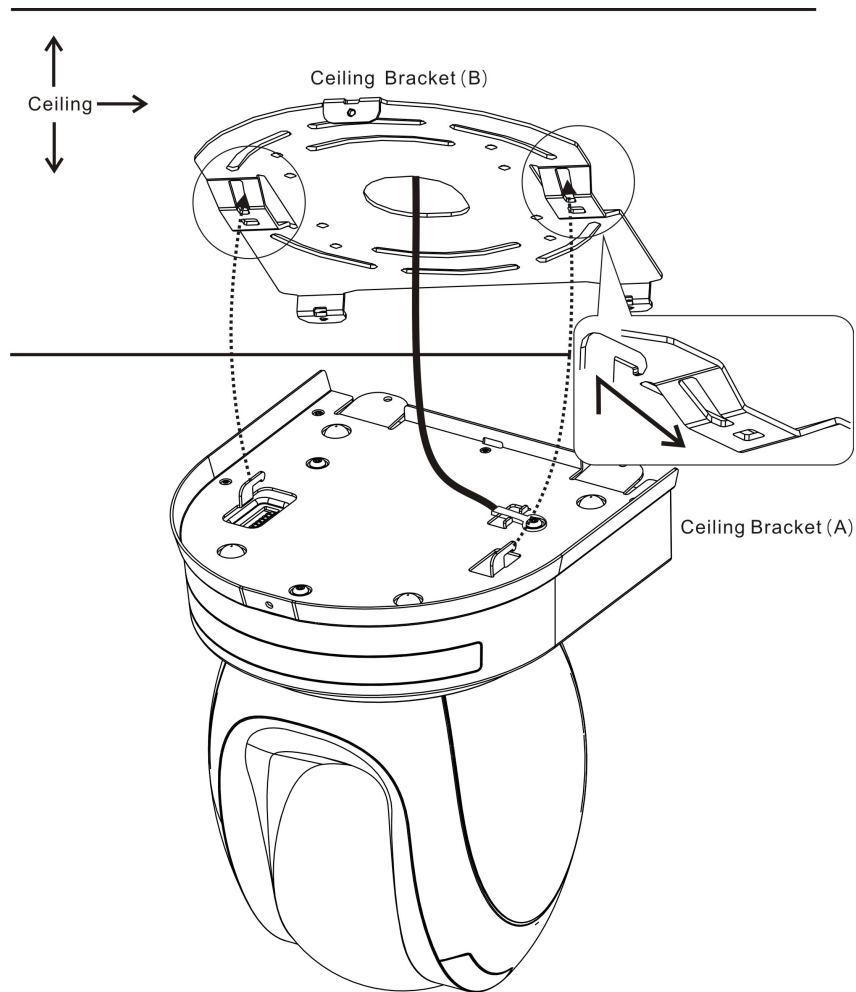
Attach the ceiling bracket (A) to the bottom of the camera using the 3 screws. Align the screw holes on the bottom of the camera with those in the ceiling bracket to the camera.



Tighten the screws a bit at a time in the numbered order shown in the illustration. Attach the retaining wire using the screw designated as number ③ above. After all of the screws are inserted and temporarily tightened properly, securely tighten each one in turn.

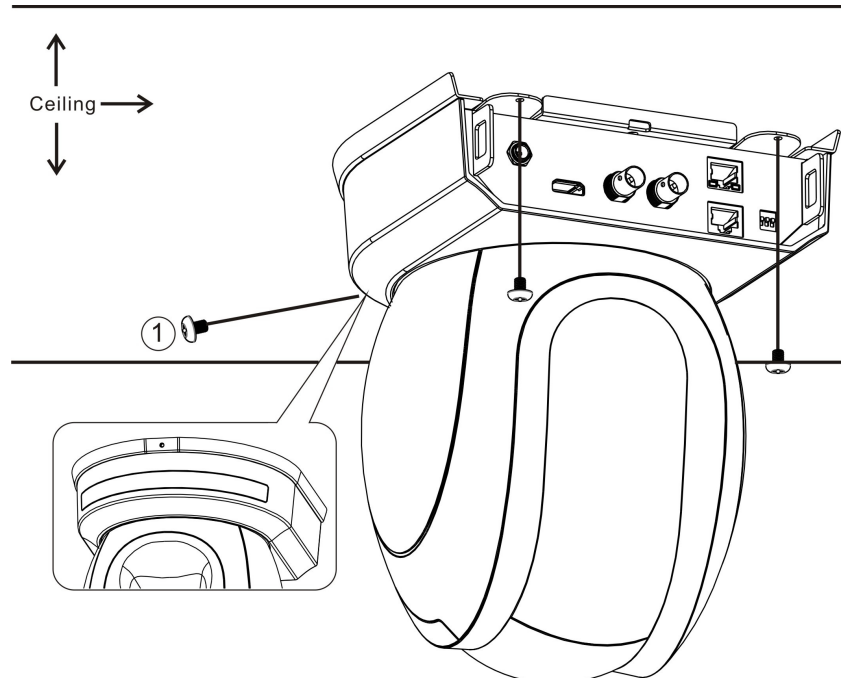
Step 5

Insert the protrusions raised on the ceiling bracket (A) into the spaces prepared in the ceiling bracket (B), and temporarily attach them by pushing the ceiling bracket (A) to the rear.



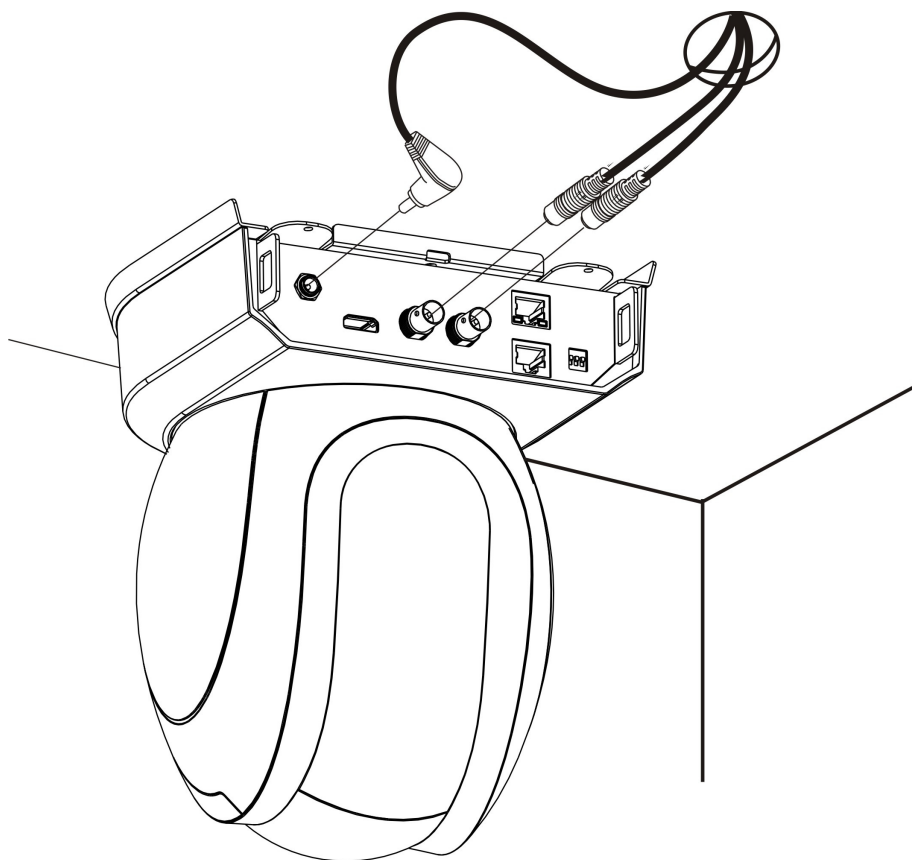
Step 6

While pushing up on the front part of the camera, attach it using the three screws provided, starting with the screw at position.



Step 7

Connect the cables to the connectors on the rear of the camera.



Removing the camera

Step 1

Remove the 3 screws used to attach the camera in step 6 of “Installation”.

Step 2

While pushing the entire camera up towards the ceiling, move the camera to the front. The hooks will disengage, and you can remove the camera.

OSD Operational Description

◎ Selection marked as "***", represents factory default value

Menu Tree Structure			
MAIN MENU	MODE	ITEM	NOTES
CAMERA SETUP	FOCUS		
	AUTO*	DZOOM	ON/ OFF*
		DEFAULT	Return to default setup
		RETURN	Return to previous setup page
	MANUAL	DZOOM	ON/ OFF*
		DEFAULT	Return to default setup
		RETURN	Return to previous setup page
	PUSH AUTO	DZOOM	ON/ OFF*
		TRIGGER	Press to enable PUSH AUTO
		DEFAULT	Return to default setup
		RETURN	Return to previous setup page
	EXPOSURE		
	AUTO*	BRIGHTNESS	-7> -6> -5 ...> 0* > +1> ...> +7
		GAIN LIMIT	+6db* > +8db > +10db> ...> +26db > +28db
		SHUTTER	ON/ OFF*
		WDR	ON/ OFF*
		BLC	ON/ OFF*
		DEFAULT	Return to default setup
		RETURN	Return to previous setup page
	SHUTTER	BRIGHTNESS	-7> -6> -5 ...> 0* > +1> ...> +7
		GAIN LIMIT	+6db* > +8db > +10db> ...> +26db > +28db
		SHUTTER	1/1> 1/2> ...> 1/30* > 1/60> ...> 1/6000> 1/10000 (NTSC) 1/1> 1/2> ...> 1/25* > 1/50> ...> 1/6000> 1/10000 (NTSC)
		WDR	ON/ OFF*
		DEFAULT	Return to default setup
		RETURN	Return to previous setup page
	IRIS	BRIGHTNESS	-7> -6> -5 ...> 0* > +1> ...> +7
		GAIN LIMIT	+6db* > +8db > +10db> ...> +26db > +28db
		IRIS	F14> F11> 9.6> ...> F2.8> F2.4> F2> F1.6*
		WDR	ON/ OFF*
		DEFAULT	Return to default setup
		RETURN	Return to previous setup page

CAMERA SETUP	DAY/ NIGHT		
	AE	DEFAULT	Return to default setup
		RETURN	Return to previous setup page
	DAY*	DEFAULT	Return to default setup
		RETURN	Return to previous setup page
	NIGHT	DEFAULT	Return to default setup
		RETURN	Return to previous setup page
	WHITE BALANCE		
	AUTO*	DEFAULT	Return to default setup
		RETURN	Return to previous setup page
	MANUAL	RED GAIN	0> 1> 2> ...> 212* > 213> ...> 255
		BLUE GAIN	0> 1> 2> ...> 148* > 149> ...> 255
		DEFAULT	Return to default setup
		RETURN	Return to previous setup page
	PUSH AUTO	TRIGGER	Press and will activate after 3 seconds
		DEFAULT	Return to default setup
		RETURN	Return to previous setup page
	NOISE REDUCTION		
		LEVEL	0* > 1> 2> 3> 4> 5
		DEFAULT	Return to default setup
		RETURN	Return to previous setup page
	EFFECT SETUP		
		NEGATIVE	ON/ OFF* (This function is ineffective under night mode)
		MIRROR	OFF* > LEVEL > ROTATE
		FREEZE	ON/ OFF*
		DEFAULT	Return to default setup
		RETURN	Return to previous setup page
GROUP SETUP		NUMBER	1> 2> 3> 4> 5> 6 > 7> 8
		AUTOPAN INDEX	1> 2> 3> ...> 31> 32
		PRESET NUMBER	0* > 1> 2> 3...> 31> 32
		SPEED (DPS)	1> 2> 3> ...> 59> ...> 60*
		DWELL TIME (SEC)	1> 2* > 3> ...> 126> 127
		EXECUTE	Press to execute cruise function
		DEFAULT	Return to default setup
		RETURN	Return to previous setup page
VIDEO SETUP	*1080/ 59.94i (NTSC)	LEVEL	0> 1> ...> 96* > 97> ...> 198> 199
		VERTICAL	0> 1> ...> 36* > 37> ...> 98> 99
		DEFAULT	Return to default setup
		RETURN	Return to previous setup page

VIDEO SETUP	1080/ 50i (PAL)	HORIZONTAL	0> 1> ...> 96* > 97> ...> 198> 199
		VERTICAL	0> 1> ...> 36* > 37> ...> 98> 99
		DEFAULT	Return to default setup
		RETURN	Return to previous setup page
	1080/ 29.97p (NTSC)	HORIZONTAL	0> 1> ...> 96* > 97> ...> 198> 199
		VERTICAL	0> 1> ...> 36* > 37> ...> 98> 99
		DEFAULT	Return to default setup
		RETURN	Return to previous setup page
	1080/ 25p (PAL)	HORIZONTAL	0> 1> ...> 96* > 97> ...> 198> 199
		VERTICAL	0> 1> ...> 36* > 37> ...> 98> 99
		DEFAULT	Return to default setup
		RETURN	Return to previous setup page
	720/ 59.94p (NTSC)	LEVEL	0> 1> ...> 96* > 97> ...> 198> 199
		VERTICAL	0> 1> ...> 36* > 37> ...> 98> 99
		DEFAULT	Return to default setup
		RETURN	Return to previous setup page
	720/ 50p (PAL)	LEVEL	0> 1> ...> 96* > 97> ...> 198> 199
		VERTICAL	0> 1> ...> 36* > 37> ...> 98> 99
		DEFAULT	Return to default setup
		RETURN	Return to previous setup page
	720/ 29.97p (NTSC)	LEVEL	0> 1> ...> 96* > 97> ...> 198> 199
		VERTICAL	0> 1> ...> 36* > 37> ...> 98> 99
		DEFAULT	Return to default setup
		RETURN	Return to previous setup page
	720/ 25p (PAL)	LEVEL	0> 1> ...> 96* > 97> ...> 198> 199
		VERTICAL	0> 1> ...> 36* > 37> ...> 98> 99
		DEFAULT	Return to default setup
		RETURN	Return to previous setup page
OSD SETUP		ID DISPLA	ON/ OFF*
		TITLE DISPLAY	ON/ OFF*
		TITLE EDIT	Maximum 15 characters
		ZOOM RATIO	ON/ OFF*
		LANGUAGE	ENGLISH* /繁體中文/ 簡體中文
		DEFAULT	Return to default setup
		RETURN	Return to previous setup page
		DEFAULT	Return to default setup
		RETURN	Return to previous setup page

CAMERA SETUP > FOCUS SETUP

Users can setup focus application. Factory settings as shown below:

	FOCUS
MODE	Auto
DZOOM	OFF
TRIGGER	OFF
DEFAULT	OFF
RETURN	

■ **MODE:**

This function is used for setting up focus mode, it can be set to **Auto**/ Manual/ Push Auto.

1. **Auto:** Select auto mode to enable automatic adjustment of the focus position.
2. **Manual:** Select manual mode to setup focus position manually.
3. **Push Auto:** Select push auto to adjust focus position TELE or WIDE, the preset value becomes AF mode and returns to Manual Focus mode.

■ **DZOOM:**

Digital zoom can be set to ON/ OFF.

■ **TRIGGER:**

Select this function to enable PUSH AUTO setup, but setup option must first be set to option PUSH AUTO.

■ **DEFAULT:**

Return to default setup.

■ **RETURN:**

Return to previous setup page.

CAMERA SETUP > EXPOSURE SETUP

Users can setup exposure application. Factory settings as shown below:

	EXPOSURE
MODE	AUTO
BRIGHTNESS	0
GAIN LIMIT	+6db
SHUTTER	OFF
IRIS	OFF
WDR	F1.6
BLC	OFF
DEFAULT	OFF
RETURN	

■ **MODE:**

It consists of 3 types of mode: IRIS/ AUTO/ SHUTTER (Default Setup: AUTO).

1. **IRIS:** Select iris as priority adjustment mode.
2. **AUTO:** System will auto detect its brightness and the backlight compensation is auto defined by the system.
3. **SHUTTER:** Select shutter as priority adjustment mode.

■ **BRIGHTNESS:**

Image brightness setup, setup range is 0~7. (Default Setup: 0).

<NOTE> This function will lock the settings on the BLC mode.

- **GAIN LIMIT:**
Setup Gain Limit, setup range = 0~28 (Default Setup: 6).
- **SHUTTER:**
Shutter Speed consist of 5 types of mode: NTSC: 1/1 , 1/2 , 1/30 , 1/60 , 1/10000 and PAL: 1/1 , 1/2 , 1/25 , 1/60 , 1/10000 (Default Setup: 1/30).
- **IRIS:**
Setup Iris value, iris setup range = F14~F1.6 (Default Setup: F1.6).
- **WDR:**
Setup Effio double scan WDR function ON/ OFF.
- **BLC:**
System will auto detect its brightness and the backlight compensation is auto defined by the system.
- **DEFAULT:**
Return to default setup.
- **RETURN:**
Return to previous setup page.

CAMERA > DAY/ NIGHT

Users can setup D/ N application. Factory settings as shown below:

	DAY/ NIGHT
MODE	DAY
DAY	OFF
NIGHT	OFF
AE	OFF
DEFAULT	OFF
RETURN	

- **MODE:**
Three types of setup modes: AE/ DAY/ NIGHT (Default Setup: AE).
 1. AE: According to DAY→ NIGHT and NIGHT→DAY (Threshold Value), it will auto switch to Color or B/W.
 2. DAY: Switch to color mode.
 3. NIGHT: Switch to B/ W mode.
- **DAY:**
The threshold color value changes (from color to B/ W) under AE mode (Default Setup: 11).
- **NIGHT:**
The threshold color value changes (from B/ W to color) under AE mode.
- **AE:**
According to DAY→ NIGHT and NIGHT→ DAY (Threshold Value).
- **DEFAULT:**
Return to default setup.
- **RETURN:**
Return to previous setup page.

CAMERA > WHITE BALANCE

Users can setup white balance application. Factory settings as shown below:

WHITE BALANCE	
MODE	AUTO
AUTO	OFF
MANUAL	OFF
PUSH AUTO	OFF
DEFAULT	OFF
RETURN	

■ **MODE:**

Three types of WB mode setup: AUTO/ MANUAL/ PUSH AUTO (Default Setup: AUTO).

■ **AUTO:**

System auto adjusts the white balance condition and maintains it, no matter how the environment changes.

■ **MANUAL:**

Set white balance to manual mode to manually adjust red or blue gain (Setup Value: 0~255), higher the value darker the color.

■ **PUSH AUTO:**

PUSH AUTO ON: Enable auto tracing white balance.

PUSH AUTO OFF: Disable auto tracing white balance and record current white balance value.

■ **DEFAULT:**

Return to default setup.

■ **RETURN:**

Return to previous setup page.

CAMERA SETUP > NOISE REDUCTION

Users can setup noise reduction application. Factory settings as shown below:

NOISE REDUCTION	
LEVEL	0
DEFAULT	OFF
RETURN	

■ **LEVEL:**

Noise Reduction Level: 0~5. Higher the level, better the noise reduction performance (Default Setup: 0).

■ **DEFAULT:**

Return to default setup.

■ **RETURN:**

Return to previous setup page.

CAMERA SETUP > EFFECT SETUP

User can setup some image application and effect. Factory settings are as shown below:

EFFECT SETUP	
NEGATIVE	OFF
MIRROR	OFF
FREEZE	OFF
DEFAULT	OFF
RETURN	

- **NEGATIVE:**
Negative effect can be set to ON/ OFF (Default Setup: OFF).
- **MIRROR:**
Three Types of MIRROR mode: OFF/ HORIZONTAL/ ROTATE (Default Setup: OFF).
- **FREEZE:**
Freeze function can be set to ON/ OFF (Default Setup: OFF).
- **DEFAULT:**
Return to default setup.
- **RETURN:**
Return to previous setup page.

GROUP SETUP

This function is designed to group the preset points in order. Each group is allowed to set up 32 preset points for moving speed and retention time. The Auto Pan has a total of 8 setting groups.

GROUP SETUP	
NUMBER	
AUTOPAN INDEX	
PRESET NUMBER	0
SPEED (DPS)	60
DWELL TIME (SEC)	2
EXECUTE	OFF
DEFAULT	OFF
RETURN	

- **NUMBER:**
Select and setup cruise function: 1~4 (Default Setup: 1).
- **AUTOPAN INDEX:**
Setup AUTOPAN preset value 1~34 into groups.
- **PRESET NUMBER:**
Setup desired preset points. If you do not wish to set all 32 preset points, set "0" as the last preset point.
<NOTE> "0" meaning to ignore the point after AUTOPAN points.

- **SPEED (DPS):**
Setup the moving speed, higher the value faster the speed.
- **DWELL TIME (SEC):**
Setup the dwell time after cruise function stops (Dwell Time Range: 1~127 Sec.).
- **EXECUTE:**
Precede preset function.
- **DEFAULT:**
Return to default setup.
- **RETURN:**
Return to previous setup page.

VIDEO SETP

User can setup video application. Factory settings are as shown below:

VIDEO SETUP	
MODE	1080/ 59.94i
HORIZONTAL	96
VERTICAL	36
DEFAULT	OFF
RETURN	

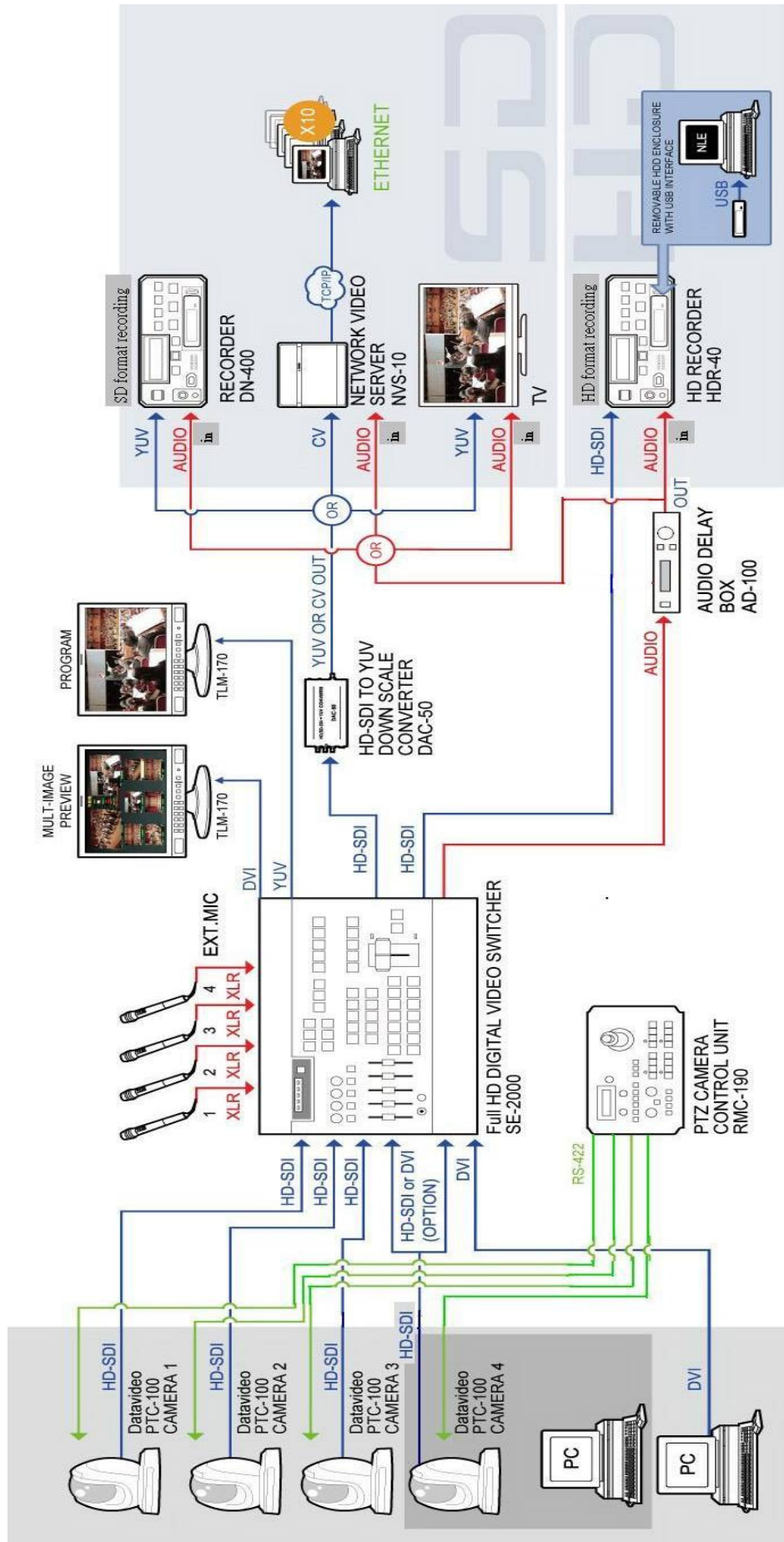
- **MODE:**
Eight types of video modes:
NTSC: 1080/ 59.94i, 1080/ 29.97p, 720/ 59.94p, 720/ 29.97p
PAL: 1080/ 50i, 1080/ 25p, 720/ 50p, 720/ 25p
- **HORIZONTAL:**
Can setup and adjust horizontal viewing angle: 0~199 (Default Setup: 96).
- **VERTICAL:**
Can setup and adjust horizontal viewing angle: 0~199 (Default Setup: 96).
- **DEFAULT:**
Return to default setup.
- **RETURN:**
Return to previous setup page.

OSD SETUP

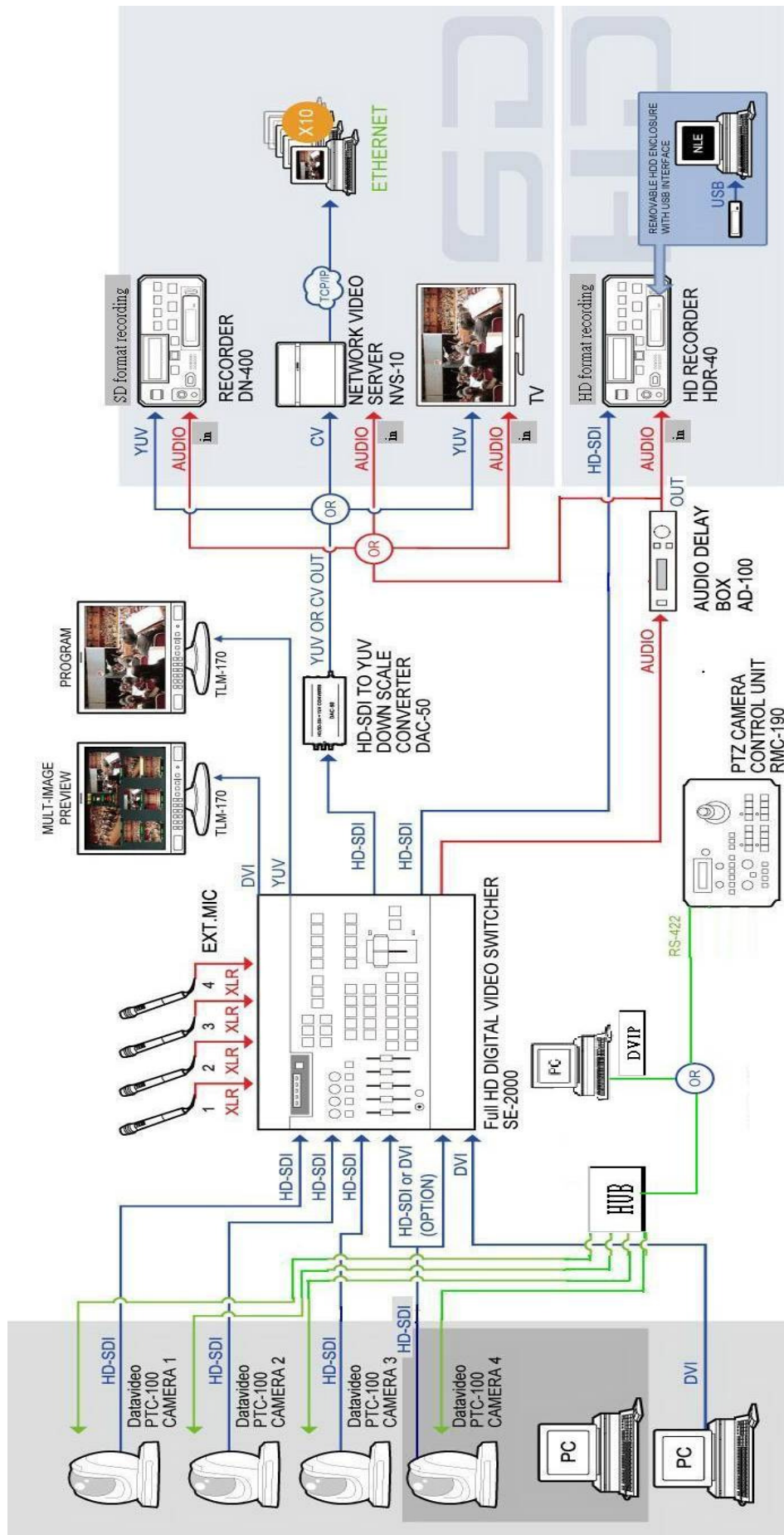
OSD SETUP	
ID DISPLAY	OFF
TITLE DISPLAY	OFF
TITLE EDIT	TITLE
ZOOM RATIO	OFF
LANGUAGE	ENGLISH
DEFAULT	OFF
RETURN	

- **ID DISPLAY:**
To reveal or hide ID, can be set to ON/ OFF.
- **TITLE DISPLAY:**
To reveal or hide Title, can be set to ON/ OFF.
- **TITLE EDIT:**
Enter a title name (maximum 15 characters).
- **ZOOM RATIO:**
To reveal or hide ZOOM RATIO, can be set to ON/ OFF.
- **LANGUAGE:**
Supports three types of languages: ENGLISH/ 繁中/ 簡中.
- **DEFAULT:**
Return to default setup.
- **RETURN:**
Return to previous setup page.

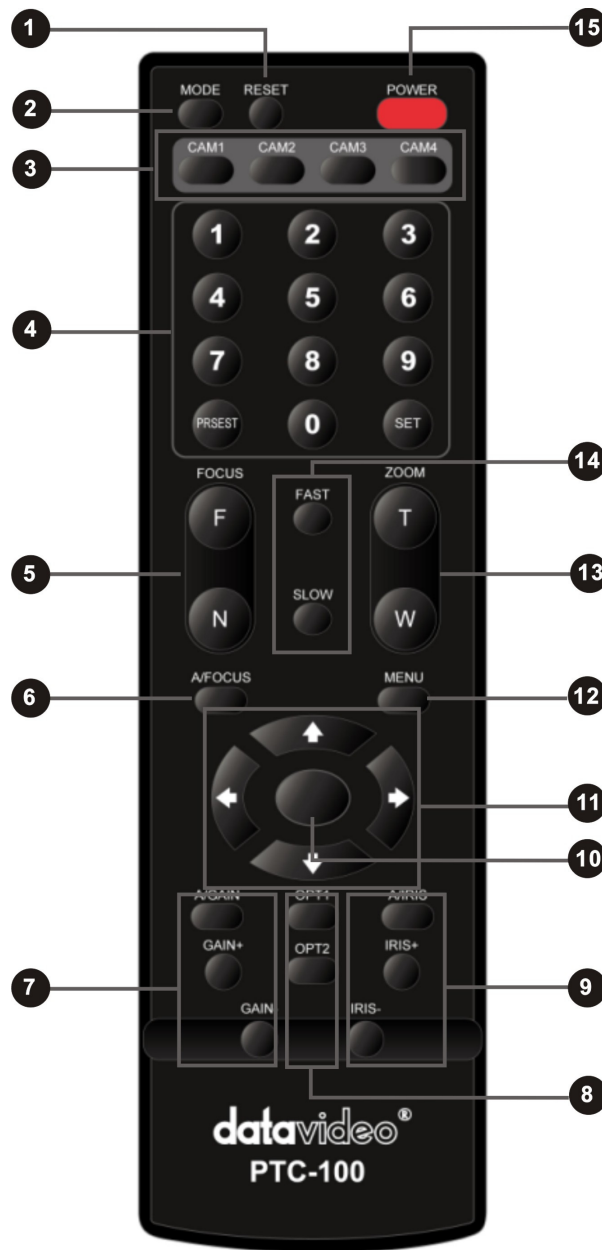
Example Setup of PTC-100



Example Setup of PTC-100



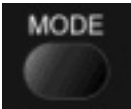





Remote Controller Button Description

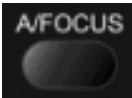
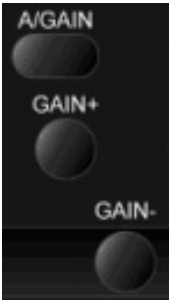








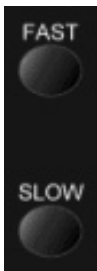

Menu Setup

PTC-100 requires HDMI monitor to browse the current setup status, and operation setup using keyboard or remote controller buttons: MENU/ UP/ DOWN/ LEFT/ RIGHT/ A/ FOCUS.

Setup methods of all menu function items are similar. Press the **MENU** button to enter or exit camera menu options, press **UP** or **DOWN** arrow button to select the menu option. Use **LEFT** or **RIGHT** arrow button to enter sub-menu option or press **A/ FOCUS** button to exit sub-menu option. Then use the **LEFT** or **RIGHT** arrow button to change the value of the selected item or option.

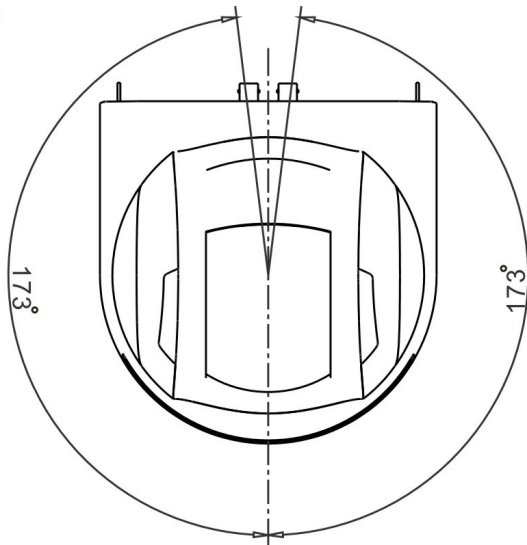
Item	Illustration	Function	Description
1		Color Bar Setup (MODE)	Use the MODE button to setup and adjust the screen brightness and color density.
2		PAN/ TILT Control (RESET)	Press RESET button to face the camera back to the front.
3		Camera Select (CAM1~CAM4)	<p>Operating more than one camera with the Remote Controller.</p> <ul style="list-style-type: none"> Set the IRID (SW2) switch (at the rear of the main unit) of the camera which you intend to operate: 1/ 2/ 3.  <ul style="list-style-type: none"> Press a CAMERA SELECT (CAM 1~ CAM 4) button (on the Remote Controller) which corresponds to the number set in step 1. After the above setup you will be able to operate the camera (s) specified by number.
4		Position Setup (0~9) (PRESET) (SET)	<p>Up to 32 combinations of settings (position, zooming, focusing, gain control and iris control) can be preset.</p> <p>Adjusting the Preset Point Adjust the position, the zooming, the focusing, the gain control and the iris control of the camera.</p> <p>Setting up the Preset Point Press any of the POSITION buttons 1~32 and then press SET button.</p> <p>Recalling the memorized setting Press any of the POSITION buttons 1~32 and then press PRESET button.</p> <p>Setting up the Group Scan mode Press any of the POSITION buttons 1~8 and then press MENU button.</p> <p>To face the camera back to the front Press the number 0 and then preset button.</p>
5		Focus Setup (FAR) (NEAR)	<p>To focus the camera on a subject manually Press either FAR or the NEAR button to have the camera focus on the subject manually.</p>

Item	Illustration	Function	Description
6		Auto Focus Control (A/ FOCUS)	<p>To focus the camera on a subject automatically Press the A/ FOCUS button. The camera focuses on the subject at the center of the screen automatically.</p> <p>Exit Sub-Menu Option Press A/ FOCUS button to exit sub-menu option.</p>
7		Brightness Control (A/ Gain) (GAIN+) (GAIN-)	<p>When shooting a subject within a dark environment Press GAIN+ button brighten-up or GAIN- to darken the environment.</p> <p>To cancel the function or to return to default setup, press the A/ GAIN button.</p>
8		TALLY Lamp Control (OPT1~OPT2)	
9		Auto Iris Control (A/ IRIS) (IRIS+) (IRIS-)	<p>To make the subject appear brighter Adjust the iris opening (aperture), to control the amount of light coming through the lens (ie. the "exposure"). Press IRIS+ button to open the iris, more light comes in and the subject appears brighter and IRIS- vice versa.</p> <p>To cancel the function or to return to default setup, press the A/ IRIS button.</p>
10			<p>Switching the Pan/ Tile Speed Press SPEED button to switch to diffent speed (High/ Low).</p>
11		Direction Arrows (UP/ DOWN/ LEFT/ RIGHT)	<p>To change direction of the camera Press the arrow function to change the directions of the camera head.</p> <p>Stop Preset Point Auto Scan mode Press any of the DIRECTION buttons.</p> <p>Select Menu Option Press UP or DOWN button to select the menu option.</p> <p>Enter Sub-Menu Option Press LEFT or RIGHT button to enter sub-menu option.</p> <p>Adjust Setup Value Press LEFT or RIGHT button to adjust the setup value.</p>

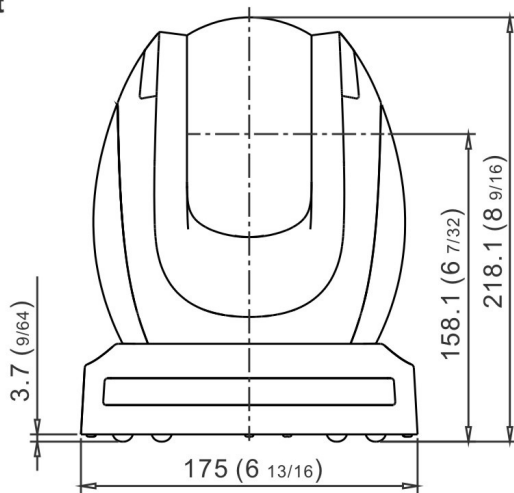
Item	Illustration	Function	Description
12		Enter/ Exit Camera Menu Option	Enter or Exit Camera Menu Option
13		Zoom in/ Zoom Out Button Enlarge Image (TELE) Minimize Image (WIDE)	Zooming Press either TELE button to zoom-in when the subject appears close to the camera or WIDE button to zoom-out when the subject appears far away from the camera.
14		Speed Button (FAST/ SLOW)	Switching the Zoom In/ Out Speed Press this button to switch to different speed (High/ Low).
15		Power Button	Switching Remote Controller ON/ OFF

Dimension

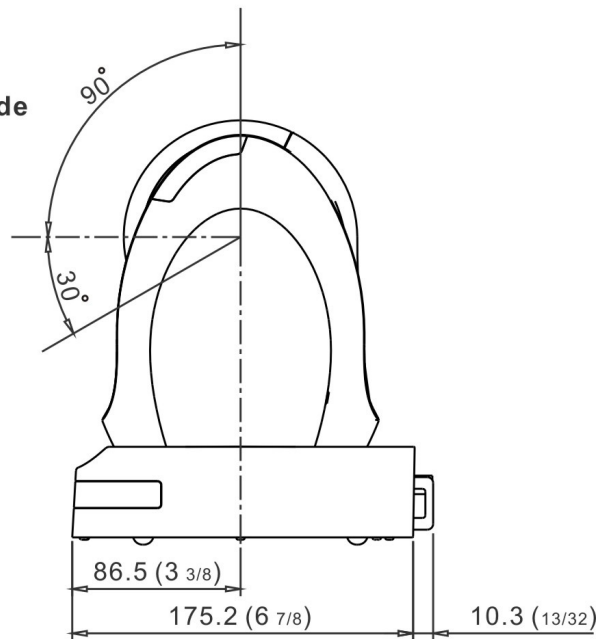
Top



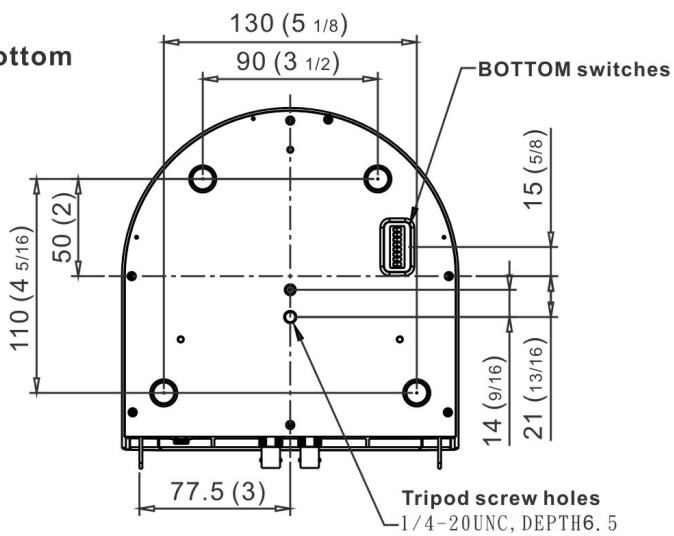
Front



Side



Bottom



Unit: mm (inches)

Specification

Item No.	PTC-100 SD/ HD
Description	HD-SDI/HDMI + CVBS PTZ Camera
Video	
Image Device	1/3" Sony Exmor 3.0MP CMOS sensor
Picture Elements	Approx. 3M (1920H × 1080V)
Resolution	SD / HD / FHD
Signal system	480i (CBS) 576i (CBS) 720_50p/720_59.94p/ 720_25p/720_29.97p/ 1080_50i/1080_59.94i/ 1080_25p/1080_29.97p
Min. Illumination	Less than 3.0 lx (F1.6, 50 IRE)
S/N Ratio	More than 50 dB
Electronic Shutter	1/1 to 1/10,000 s, 22 steps
Gamma	0.45
Iris Control	Auto / Manual
Wide Dynamic Range	On / Off
Digital Noise Reductions	On / Off (2D)
Day & Night (ICR)	AE / Day / Night (Default: Day)
Day & Night I/O	-
On-Screen-Display (OSD)	English / Simplified Chinese / Traditional Chinese
OSD Control	IR Controller
Digital Slow Shutter (DSS)	On / Off
Flickerless Mode (Bending Fixed)	50Hz~60Hz

Motion Detection	-
MD Sensitivity	-
Alarm	-
Privacy Masking	-
White Balance	Auto(ATW) / Manual / Push Auto
Gain Control	Auto/Manual (6 to 28 dB, 2 dB steps)
Back Light Comp.	On / Off
Digital Zoom	12X
Mirror	Horizontal / Rotate
Freeze	On / Off
Positive / Negative	On / Off
Color Bar	On / Off (Full Bar)
Power Sleep Design	Yes
Pan / Tilt / Zoom	
Mini. Shutting Distance	-
Panning/Tilting Range	Pan: $\pm 173^{\circ}$, Tilt: $+90^{\circ}$ to -30°
Panning/Tilting Speed (100 step)	Manual: 1~60%/Sec Preset: 60%/Sec
Focus Mode	Auto / Manual / Push Auto
Preset	32 Position
Coordinate	X, Y, Z
PTZ Mode	8 Group
Camera ID	0~255
Camera Title	Up to 15 characters
Initializing Time	40 sec

Day / Night	
IR-Cut filter Removable	Yes
IR Distance	-
LED (pcs/angle)	-
Light Transistor	-
Wavelength	-
Lens	
Lens Type	Mototized 20X Zoom
Focal Length	f=4.7 mm (W) to 94.0 mm (T)
Aperture Range	F1.6 to F3.5
Angle of View	54.1 °(W-end) to 2.9°(T-end)
Aspect ratio	16 : 9
Lens Control	DC / Manual
Others	
Weather Proof	-
Vandal Proof	-
Bracket	Yes
Sync. System	Internal
IR Receiver	Two IR Receiver in the Front of PTZ
Remote Control	<p>RS422 through RJJ45</p> <p>The diagram illustrates the RS422 connection between the CAMERA and the Controller using RJ45 Female connectors. On the CAMERA side, the pin configuration is: 1 GND, 2 NC, 3 RX-, 4 TX-, 5 TX+, 6 RX+, 7 NC, 8 NC. On the Controller side, the pin configuration is: 1 GND, 2 NC, 3 TX-, 4 RX-, 5 RX+, 6 TX+, 7 NC, 8 NC. Arrows indicate the signal flow: TX- from CAMERA to RX- on Controller, and TX+ from CAMERA to RX+ on Controller.</p>

Protocol	Pelco D/ P; Sony VISCA
Baud Rate	9600bps
Video Output (HD)	HD-SDI (BNC)/ HDMI
Video Output (SD)	BNC
Video Format Output	1Vp-p/ 75Ohms.
Audio	-
FAN	-
Heater	-
Tally LED	2 LED Built in the PTZ Zoom Module Side
Dimension (incl. BNC)	218mm (H) x 173mm (W) x 185.5mm (D)
Weight	2.25 Kg
Power Supply	DC12±10% Including the “Anti-Drop” design
Power Consumption	26W
Operating Temperature	0°C~50°C
Certifications	CE/ FCC Class A
Accessories	PTZ Bracket; IR/ RF Controller
Other	DVIP Control Board (Daughter Board Design)

Service & Support

It is our goal to make your products ownership a satisfying experience. Our supporting staff is available to assist you in setting up and operating your system. Please refer to our web site www.datavideo-tek.com for answers to common questions, support requests or contact your local office below.

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